



Sustainable Fuel Cycle

TASK FORCE

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Sustainable Fuel Cycle Task Force Science Panel

February 9, 2011

Dr. John P. Holdren, Ph.D.
Assistant to the President
for Science and Technology
Director of the Office of Science Technology Policy
1725 17th Street, NW, Room 5230
Washington, DC 20502

Dear Dr. Holdren:

As the federal government moves into 2011 in a continuing resolution, actions taken by the Administration have brought to a standstill all scientific work related to solving the United States' program of high-level radioactive waste and spent nuclear fuel disposal.

No viable alternative solution has been brought forward, let alone authorized by Congress, as a replacement for their directive of July 23, 2002, in Public Law 107-200, approving the site at Yucca Mountain, Nevada, for the development of a repository for the disposal of high-level radioactive waste and spent nuclear fuel, pursuant to the Nuclear Waste policy Act of 1982.

There is no scientific reason for this situation; in fact the scientific soundness of the selection of Yucca Mountain was well on its way to being independently confirmed by the Nuclear Regulatory Commission (NRC) when the Administration stopped the program. Credible scientific support for the project is found throughout the community of knowledgeable scientists and engineers.

On December 17, 2010, you issued an important memorandum on scientific integrity. Your memorandum responded to a March 9, 2009 memorandum issued by President Obama articulating principles central to the preservation and promotion of scientific integrity. As Director of the Office of Science and Technology Policy, your office is responsible for ensuring the highest level of integrity in all aspects of the Executive Branches involved with scientific and technical processes.

We find that there is a conspicuous inconsistency between the intent of your memorandum and the DOE's and NRC's actions in suspending activities related to the licensing of Yucca Mountain.

Today, while the legislatively mandated license application sits in limbo, no technical authority has concluded either that Yucca Mountain is not suitable for a repository, or that the science supporting the license application is not sound. There are no published analyses done in conformance with the applicable requirements and standards that show that the Yucca Mountain site would not meet the safety standards. Statements purporting that the Yucca Mountain site does not meet the safety standards are found to be either not supported by analyses that conform to the regulations, or are based on selected portions of outdated analyses that are not consistent with the current requirements.



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Moreover, presentations to the Blue Ribbon Commission, empanelled by the Secretary to articulate the “better way to deal with the wastes,” have revealed nothing new. This is not surprising, as the country debated the merits of alternative means of disposal of the wastes for decades before embarking on the path forward legislated by the Nuclear Waste Policy Act. Even the reprocessing options being studied today do not lead to a complete solution. Evaluations have shown that legacy wastes likely will not be reprocessed and will require repository disposal. All known advanced technology options have some residual high level radioactive waste. High-level radioactive wastes have no disposal path other than a repository.

Your memorandum also requires agencies to develop a culture of scientific integrity, and strengthen the actual and perceived credibility of government research. What better way is there to demonstrate these principles than to let the process move forward as Congress intended to happen? The NRC staff should be directed to issue the Safety Evaluation Report on post closure safety of Yucca Mountain. This would ensure that, as your memorandum directs, “data and research used to support policy decisions undergo independent peer review by qualified experts where feasible and appropriate and consistent with law.” It would also facilitate the free flow of scientific and technological information, another tenet of your memorandum.

A way must be found to restart the Yucca Mountain licensing process. A Congressionally directed solution is in place, and science, not just politics, should determine whether or not a license to construct a repository at Yucca Mountain is appropriate. State governors and other state and local elected officials perceive that without a repository, wastes now in 39 states could remain there indefinitely. Furthermore, without a repository, interim storage alone is likely to falter as it has each time it has been proposed in the past. There is nothing to indicate that state opposition to repository development would not be expected if the country sought another repository site.

There are, however, indications that local communities may be willing participants. In particular, Nye County, Nevada, has gone on record indicating its acceptance of the role assigned to it when Congress selected Yucca Mountain for repository development. In fact, five of the nine Nevada Counties identified as affected units of government, have opposed the DOE withdrawal of the Yucca Mountain License Application in submittals to the NRC Atomic Safety Licensing Board,



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For your information, please find attached a complete copy of our statement on Nuclear Waste Management and Scientific Integrity.

The Science Panel of the Sustainable Fuel Cycle Task Force was created to provide independent science based perspectives on issues related to a sustainable nuclear fuel cycle, and offers its services as a source of scientific information about all waste management technical and licensing issues, including Yucca Mountain. If we can be of assistance, please do not hesitate to contact us.

Sincerely,
Science Panel

Isaac Winograd, Ph.D.

Wendell Weart, Ph.D.

Eugene H. Roseboom Jr., Ph.D.

Charles Fairhurst, Ph.D.

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Cc:

Chairman Jaczko, Chairman, US Nuclear Regulatory Commission
Kristine L. Svinicki, U.S. Nuclear Regulatory Commission Commissioner
George Apostolakis, U.S. Nuclear Regulatory Commission Commissioner
William D. Magwood, IV, U.S. Nuclear Regulatory Commission Commissioner
William C. Ostendorff, U.S. Nuclear Regulatory Commission
R. William Borchardt, Executive Director of Operations, U.S. Nuclear Regulatory Commission
James Dyer, Chief Financial Officer, U.S. Nuclear Regulatory Commission